

DIALECTICS OF DIGITAL WORK: NEGOTIATING DIGITAL TAYLORISM AND WORKER AUTONOMY

Introduction

The pandemic transformed, at scale, how and where knowledge work is conducted through a shift towards remote work enabled by digital technologies (Aroles et al., 2021). However, post-pandemic, organisations are retracting employee autonomy with the aim of bringing them back into the office. One telling example is Amazon which has demanded fulltime attendance in the office sending a clear message about physical presence and control (Financial Times, 2024). Simultaneously, there is also an increased use of monitoring technologies, such as algorithmic management tools, which are deployed to track employee activities across sectors (Jarrahi et al., 2021). Consequently, future knowledge work is characterised by paradoxes and tensions (Malhotra, 2021) where digital technologies both enable flexible working arrangements (Waizenegger et al., 2020), while also supporting new forms of monitoring and control (e.g., Kellogg et al., 2020; Konuk et al., 2023).

The scholarly conversation on digital futures of knowledge work is shaped by two contrasting paradigms: algorithmic control, grounded in Digital Taylorism, and the ideal of worker autonomy. Framed by Wang et al. (2020) as opposite poles on a continuum of possible work futures, these perspectives have influenced how researchers conceptualise the organisation of work. Building on Wang et al. (2020), we argue that organisational reality is not situated at either end of this continuum but unfolds as a dialectical tension between them. While Wang et al. (2020) point out the paradoxical nature of these two paradigms, there is a lack research that theorises the interplay of these two extremes and how knowledge work, mediated by digital technology, occurs along this continuum. To address this gap, we ask: *What tensions emerge in the interplay of digital Taylorism and worker autonomy, and how do managers and employees navigate these tensions in the context of hybrid work?*

Literature Review and Theoretical Lens

The contemporary discourse on the future of work is shaped by the paradigm of digital Taylorism, a modern reinvention of Taylor's (1911) scientific management principles repurposed for a time of pervasive digital technology (Wang et al., 2020). This perspective posits that algorithmic management and digital monitoring are tools of control, systematically reconfiguring the labor process to maximize efficiency (Konuk et al., 2023; Mettler, 2024). Positioned against this is the logic of worker autonomy (Wang et al., 2020), which advocates flexible work arrangements, increased employee discretion, and self-management as essential for knowledge work in the digital age. The pursuit of autonomy in the workplace is defined by a central contradiction termed the "paradox of autonomy" (Möhlmann & Zalmanson, 2017), where technologies that promise freedom often introduce new, more subtle forms of constraints (Noponen et al., 2024). Building on Wang et al. (2020), we suggest the lived reality of digital work unfolds not at the extremes, but somewhere along this continuum shaped by the negotiated interplay between organisational actors and the emerging tensions.

To understand these tensions, we engage in dialectical analysis (Ciriello & Mathiassen, 2022; Lindgren et al., 2021). Dialectical perspectives adopt a processual view on the social world meaning it is in a persistent state of ‘becoming’ (Benson, 1977) where a ‘logic of opposition’ (Robey & Boudreau, 1999) drives change. It is through opposing co-existing entities that organisations evolve, and modes of stability and change are explained through contradictory forces causing tensions within the organisation (Putnam et al., 2016). Tensions cannot be resolved completely (Jarzabkowski & Le, 2017) but instead are negotiated and renegotiated through a continuous recursive process.

Methodology

This study adopted an interpretive qualitative case study approach (Klein and Myers, 1999) within the government sector in Saudi Arabia, where hybrid work is unfolding alongside national digital transformation under Vision 2030. We carried out 50 semi-structured interviews between June and December 2024: 25 senior managers (CEO, executive directors, directors, department managers) and 25 employees (analysts, service coordinators). Interviews were face-to-face, 60-120 minutes, audio-recorded with consent and transcribed verbatim. Data were analysed in Atlas.ti using a Gioia et al. (2013) inspired approach. We identified three key dialectical tensions contributing to paradigm negotiation: authority vs democracy, mistrust vs trust, and clarity vs ambiguity, then used abductive reasoning to theorise a new “negotiated continuum”.

Findings

We highlight three dialectical tensions: how work is managed (authority vs democracy); how attitudes to work manifest (mistrust vs trust); and how work is regulated (clarity vs ambiguity). These dialectical tensions are negotiated and renegotiated (Jarzabkowski & Le, 2017) between employees and managers to shape both digital Taylorism and worker autonomy through their interplay with technology. As these paradigms operate simultaneously, this gives rise to what we conceptualise as a “negotiated continuum”.

Authority vs democracy

Hybrid work was managed in different ways including both authoritarian and democratic approaches. Some managers utilised digital systems to monitor tasks and control employee work practices, while others allowed more flexibility, granting employees autonomy over where and when they worked.

"The shift to hybrid work has driven a transition from people management to task management ... This [technology] has significantly improved operational efficiency and performance tracking, especially in remote work settings." (Manager 1)

This was viewed by some managers as essential to ensure outputs, while employees often felt micromanaged: “If the manager sees your device inactive for a minute, they track you... that’s a suffocating environment” (Employee 6). For other managers, a more democratic approach was favoured, focusing on wider organisational goals: “employees are evaluated based on their annual goals, whether they’re working on-site or remotely” (Manager 3). The dialectical tension between authoritarian and democratic approaches was not viewed as something to be resolved, but accepted as part of managing hybrid work.

Mistrust vs trust

Managers' perceptions of attitudes to work largely determined if and when digital systems of monitoring were used. Managers trusted employees perceived as responsible and independent, leaving them to manage tasks without constant monitoring.

“In terms of monitoring, I wouldn't be able to know exactly what the employee is doing all the time. It really comes down to their own integrity [...] If you don't give employees space to be trusted and self-reliant, then it's not true management.” (Manager 4)

However, some employees noted: “I have to prove myself to my manager and peers by being seen” (Employee 6). This suggests trust wasn't always there to start with, but something employees had to earn by demonstrating visibility and presence. The dialectical tension between trust and mistrust was negotiated through impression management: employees actively showing they are digitally present through being available on digital communications, tactically copying managers into emails, and being digitally visible in online meetings. Where this wasn't the case, managers were more likely to mistrust employees and enact a more authoritarian style of managing work through increased monitoring.

Clarity vs ambiguity

Although there was a policy on hybrid work, this was perceived as ambiguous and could be enacted in various ways. Employees viewed the policy as not being ‘fit for purpose’ due to a lack of clarity in how it could or should be enforced. This provided a space for negotiation but was often seen as more beneficial to managers than employees.

“There should be a policy that protects the employee. So, when a manager denies someone the right to work remotely, it shouldn't just depend on whether they feel like saying yes or no.” (Employee 2)

Ambiguity afforded managers more discretion and placed responsibility on employees to regulate their own work, often leading to increased work hours. This explains why in some cases managers resorted to implementing digital systems of control as a way to reduce ambiguity. While flexibility in hybrid work policy may be beneficial, it also enables multiple versions of work regulation to manifest, as both formal and informal rules and norms emerge, serving different interests.

Discussion and Conclusion

The discourse on the future of work is largely framed by a dialectic between two opposing paradigms: digital Taylorism and worker autonomy (Wang et al., 2020). While valuable, this binary often overlooks the complex, lived reality within organisations where these forces are not mutually exclusive choices but contradictory, coexisting dynamics. This study addresses this theoretical limitation and advances the discussion by offering two primary theoretical contributions: first, we reconceptualise digital work as a negotiated continuum and second, we advance a model of dialectical tensions that shape this space.

Reconceptualising digital work as a negotiated continuum

Our first contribution advances the theoretical understanding of the digital workplace. Much of the literature implies that organisations lean towards control or autonomy (e.g., Kellogg et al., 2020; Pianese et al., 2023), our research theorises the space between these poles. We suggest that for many organisations, the reality of digital work is best understood as a negotiated continuum; a

dynamic space where the balance between control and autonomy is not a set policy but an ongoing, emergent process. As conceptualised in our model (Figure 1), this continuum is shaped by the interplay of key dialectical tensions, such as authority vs democracy, mistrust vs trust, and clarity vs ambiguity. This conceptualisation challenges the notion that such tensions are problems to be resolved (Noponen et al., 2024). Instead, our findings suggest that these tensions drive and shape how digital work is organised and evolves. By demonstrating that managers and employees actively navigate rather than eliminate these contradictions, our study provides a nuanced model for understanding the future knowledge work within a digital context. It shifts the analytical focus from identifying an organisation's dominant paradigm (Wang et al., 2020) to examining the processes of negotiation that occur along the continuum.

A model of dialectical tensions

Our second contribution is the development of a model that identifies and explains the tensions that emerge within the negotiated continuum. We argue that the movement and positioning of work practices along this continuum are driven by the perpetual negotiation of three key dialectical tensions. These tensions are not merely descriptive categories but represent a space of struggle and compromise where the nature of digital work is actively constructed.

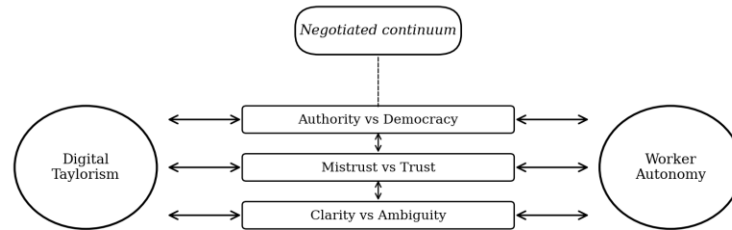


Figure 1. *A model of dialectical tensions in digital work.*

The tension of how work is management: authority vs democracy. This tension reveals a conflict over the nature of digital work. The exercise of managerial authority using algorithmic control via digital systems by some managers (Konuk et al., 2023), clashed with others who had more democratic, goal-oriented principles. Employees countered this with strategic compliance to shape the application of control in practice.

The tension of workplace attitudes: mistrust vs trust. This dialectic demonstrates how the "perils of data-driven management" (Giermindl et al., 2022) and the "dark side" of people analytics (Mettler, 2024) are operationalised and experienced. Our findings show that managerial mistrust compels an employee response of performative impression management. This creates a situation where trust and autonomy are treated as a currency which can be earned and rewarded, making worker autonomy conditional rather than inherent.

The tension of work regulation: clarity vs ambiguity. The final tension provides a structural explanation for the "individualising of responsibility" critiqued by Nyman et al. (2024). Our model reveals that organisational ambiguity creates a discretionary vacuum that, while affording some flexibility, simultaneously forces the burden of boundary setting onto individuals. This ambiguity results in inconsistency, inequity, and managerial discretion being prioritised over employee protection.

Taken together, these three tensions demonstrate how digital work is not simply implemented but is actively and continuously constructed and negotiated through the interplay of competing interests, attitudes, and interpretations, all mediated by technology.

References

- Aroles, J., Cecez-Kecmanovic, D., Dale, K., Kingma, S. F., & Mitev, N. (2021). New ways of working (NWW): Workplace transformation in the digital age. *Information and Organization*, 31(4), Article 100378.
- Benson, J. K. (1977). Organizations: A dialectical view. *Administrative Science Quarterly*, 22(1), 1-21.
- Ciriello, R.F., Mathiassen, L. (2022). Dialectical inquiry in information systems research: A synthesis of principles, in: *Proceedings of the International Conference on Information Systems*. Copenhagen.
- Financial Times. (2024, September 16). Amazon orders staff back to office five days a week.
- Giermendl, L. M., Strich, F., Christ, O., Leicht-Deobald, U., & Redzepi, A. (2022). The dark sides of people analytics: reviewing the perils for organisations and employees. *European Journal of Information Systems*, 31(3), 410-435.
- Gioia, D. A., Corley, K. G., Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia Methodology. *Organizational Research Methods*. 16(1), 15–31.
- Jarrahi, M. H., Newlands, G., Lee, M. K., Wolf, C. T., Kinder, E., & Sutherland, W. (2021). Algorithmic management in a work context. *Big data & society*, 8(2), 205395172111020332.
- Jarzabkowski, P.A., & Lê, J.K. (2017). We have to do this and that? You must be joking: Constructing and responding to paradox through humor. *Organization Studies*, 38(3-4), 433-462.
- Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at Work: The New Contested Terrain of Control. *The Academy of Management Annals*, 14(1), 366–410.
- Klein, H. K., & Myers, M. D. (1999). A set of principles for conducting and evaluating interpretive field studies in information systems. *MIS quarterly*, 67-93.
- Konuk, H., Ataman, G., & Kambur, E. (2023). The effect of digitalized workplace on employees' psychological well-being: Digital Taylorism approach. *Technology in Society*, 74, 102302.
- Lindgren, R., Mathiassen, L., & Schultze, U. (2021). The dialectics of technology standardization. *MIS Quarterly*, 45(3), 1187-1212.
- Malhotra, A. (2021). The Postpandemic Future of Work. *Journal of Management*, 47(5), 1091–1102.
- Mettler, T. (2024). The connected workplace: Characteristics and social consequences of work surveillance in the age of datification, sensorization, and artificial intelligence. *Journal of Information Technology*, 39(3), 547-567.
- Möhlmann, M., & Zalmanson, L. (2017). Hands on the wheel: Navigating algorithmic management and Uber drivers' Autonomy. *Proceedings of ICIS*, Seoul.
- Noponen, N., Feshchenko, P., Auvinen, T., Luoma-aho, V., & Abrahamsson, P. (2024). Taylorism on steroids or enabling autonomy? A systematic review of algorithmic management. *Management Review Quarterly*, 74(3), 1695-1721.
- Nyman, S., Bødker, M., & Blegind Jensen, T. (2024). Reforming work patterns or negotiating workloads? Exploring alternative pathways for digital productivity assistants through a problematization lens. *Journal of Information Technology*, 39(3), 503-520.
- Pianese, T., Errichiello, L., & Cunha, J. V. (2023). Organizational control in the context of remote working: A synthesis of empirical findings and a research agenda. *European Management Review*, 20(2), 327–346.
- Putnam, L.L., Fairhurst, G.T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10(1), 65-171.
- Robey, D., & Boudreau, M.C. (1999). Accounting for the contradictory organizational consequences of information technology: Theoretical directions and methodological implications. *Information Systems Research*, 10(2), 167-185.
- Taylor, F. W. (1911). *The principles of scientific management*. Harper & Brothers.
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429-442.
- Wang, B., Schlagwein, D., Cecez-Kecmanovic, D., et al. (2020). Beyond the factory paradigm: digital nomadism and the digital future(s) of knowledge work post-COVID-19. *Journal of the Association for Information Systems*, 21(6), 1379–1401.